

NOVOVIEW  
**SPI**  
ADDS TEXTURE  
ADDS REALISM



**REDIFFUSION**  
Simulation



# NOVOVIEW SP1/T

ADDS TEXTURE  
ADDS REALISM

## Now, texture adds realism to night/dusk training

Novoview SP1/T is the visual simulation system that brings hardware texture to night/dusk training either as a product in its own right or as a field retrofittable option on Rediffusion's top selling SP1.

It is the latest in the highly successful Novoview range, developed by Rediffusion with Evans & Sutherland Computer Corporation which includes SP3/T the world's first CGI system to incorporate texture. And because it's based on SP1, the new system incorporates proven reliability and performance.

Operationally the prime advantage of texture is in providing the height and speed cues that pilots expect in the real world. It increases overall realism, too, and that has long been accepted as the key feature in improving training quality.

SP1/T is, therefore, relevant across a broad training spectrum including rotary and fixed-wing aircraft in both civil and military applications.

The design criterion of SP1/T has been to provide the optimum texture combination but still

maintain SP1's cost-effective reputation.

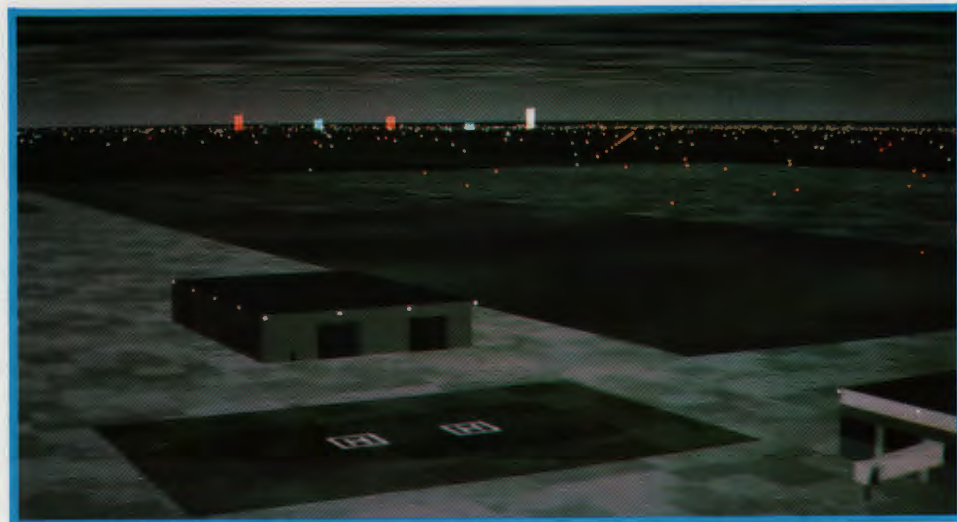
So two-dimensional texture is available in four patterns. Small pattern detail is ideal in allowing highly realistic speed and height cues close to the ground while larger texture on extensive surfaces, such as horizontal cloud faces, water or terrain, adds real life quality to the whole scene.

A further advantage is that texture allows more efficient use of surfaces and edges.

In the past these provided the small environmental features, like patterned runway concrete, now created by texture. That means the surplus power can be used elsewhere to build far more complex structures and a greater scene content.

But SP1/T not only advances the realism of flight simulation, it also increases the effectiveness of training because the system has been designed to meet current and proposed international regulatory criteria.

All this adds up to the best value textured night/dusk visual in the world ... SP1/T.





# NOVOVIEW SP1 Proven capability with the world's top selling visual

Novoview SP1 is the cost-effective night/dusk visual simulation system that has gained universal acceptance by pilots, instructors and regulatory authorities alike.

It's hardly surprising because more than 180 systems are in service for the world's major airlines and defence forces, with over 50 installed at international training schools for both rotary and fixed-wing aircraft.

Technically SP1 offers precisely the right features to improve the quality and efficacy of simulator flight training.

These include the capability to realistically represent real world airports under full lighting, with runways and taxiways, surrounding environmental lights and terrain, such as fields, mountains and three dimensional buildings.

More specifically sophisticated directionality and extensive occulting enhance scene quality while overlay and automatic management techniques ensure optimum realism.

Versatile special effects, for instance cloud scud, low visibility halo, ground fog and in-cloud glare, combine to achieve a

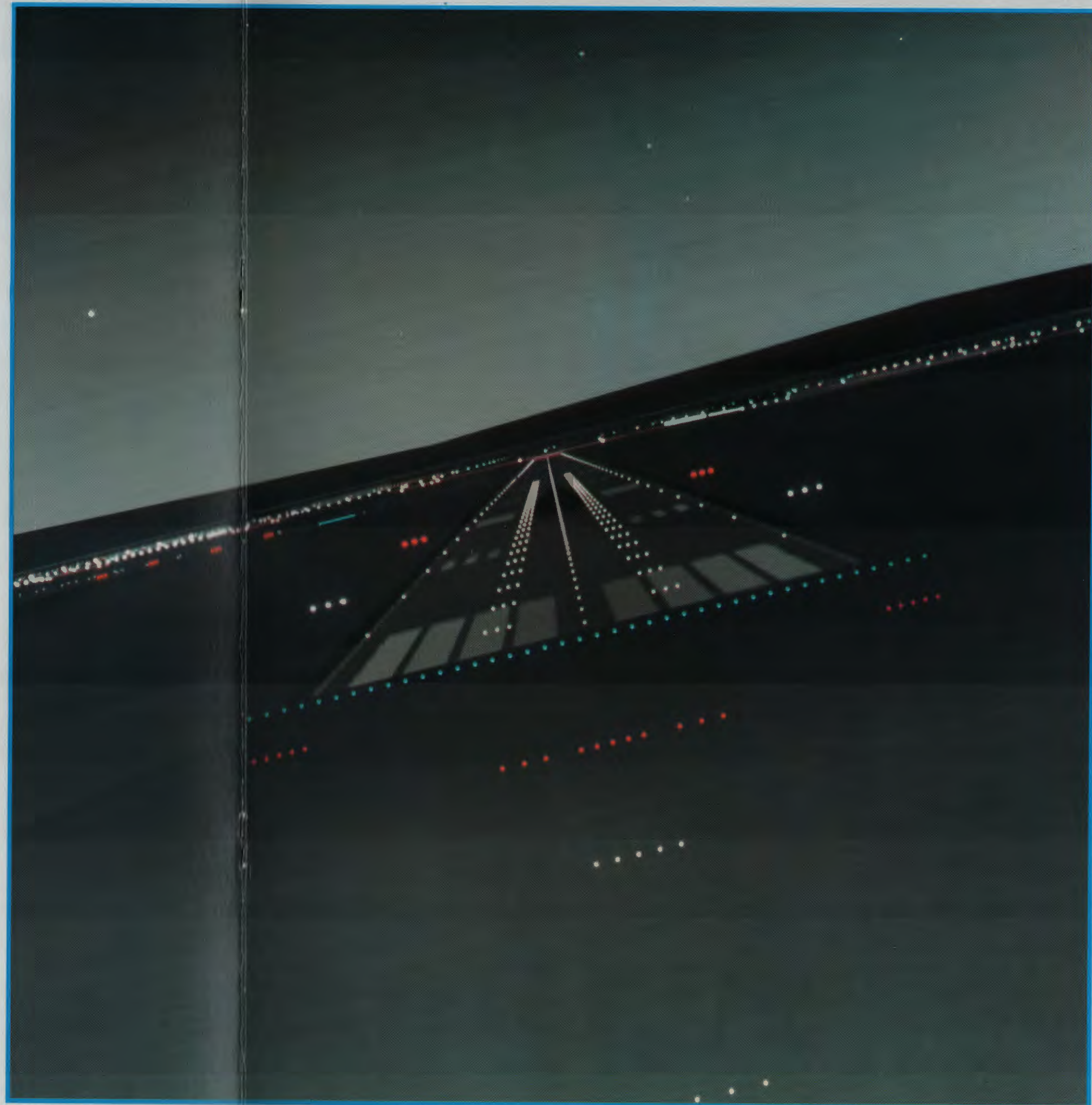
comprehensive range of accurate weather conditions.

Maintainability, too, is a key factor in SP1's outstanding record with built-in software diagnostics rapidly locating malfunctions. Availability, therefore, consistently exceeds the specified 98%.

Moreover, both SP1 and SP1/T allow maximum scene content thanks to the world's most experienced database development team, while Rediffusion has an extensive library of more than 250 airport and military environment models.

These databases include contaminated runways, jetway docking and other specialized scenarios to meet the Line Oriented Flight Training (LOFT) requirements of the Federal Aviation Administration's Phase II Advanced Simulation Plan.

And finally training establishments can now buy SP1 secure in the knowledge that texture can be added for increased realism and to meet new regulatory criteria. So Rediffusion now offers the best of both worlds in night/dusk visual simulation... SP1 with its texture option.





# Advanced display technology for all today's training needs

Since the launch of Rediffusion's unique WIDE display in 1981 more than 30 systems have been sold and those in service have rapidly gained both pilot confidence and the highest training credits.

The revolutionary WIDE presents CGI scenes to the entire flight deck without optical limitation, and exceeds today's regulatory criteria by providing an uninterrupted field-of-view, extending 150° horizontally by 40° vertically, that is in the same perspective as the real world.

Specifically, it allows the cross-cockpit views essential in turning approaches and many helicopter maneuvers.

In design WIDE incorporates three calligraphic projectors which throw the image onto a back projection screen. It is then viewed from the flight deck via a large diameter collimating mirror.

A further advantage is that it allows the image to be presented in three colors – red, green and blue – which means it will meet all current and proposed regulatory criteria.

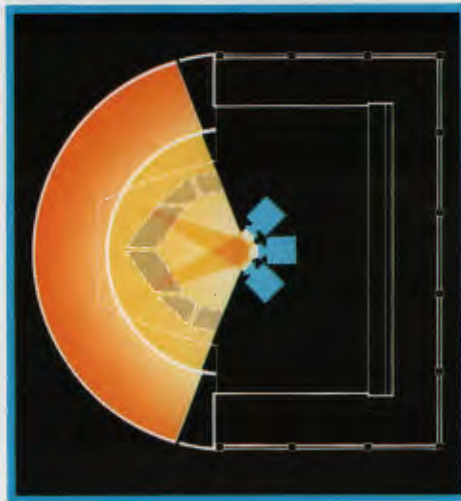
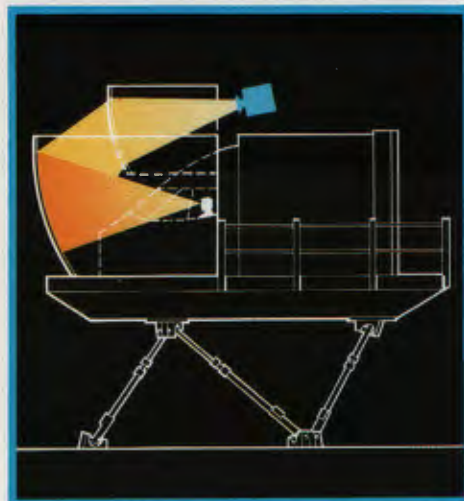
The alternative to WIDE is the monitor-based standard optical display. This consists of a beam

penetration monitor, concave collimating mirror and beamsplitter.

Meeting all current flight training regulations, it has proved highly effective in displaying near-infinity images and wide angle fields-of-view can be achieved using juxta-positioned multiple modules.

Like all Rediffusion equipment, each CGI and display system is backed by a comprehensive worldwide customer support service which provides full documentation, user software, operator training and field engineering. The firm also boasts the best simulator and visual delivery record in the business and can offer attractive financial packages.

So, with the technological lead and the backing of BET, one of the world's largest diversified services companies, the choice is clear... Rediffusion Simulation.





## SP1/1T Specification Summary

Simultaneous Capacity	Night/Dusk
■ Lights	4800
■ Surfaces: Active	224
Available	350
■ Edges: Active	256
Available	448
■ Nominal Update/ Refresh (Field) Rate:	30 Hz
■ Technology:	Hybrid Calligraphic
■ Color-Lights:	5—red, orange, amber, green, yellow/white. Blue lights are available when SP1 is displayed on the WIDE system
Surfaces:	64 grey shades
■ Display:	25" Beam Penetration
■ Performance:	17 occulting levels 7 independent landing lights. Special models available for Phase II
■ Light Effects:	Curved strings, directional, rotating, flashing, strobes

Simultaneous Capacity	Night/Dusk
■ Atmospheric Effects:	Clouds, fog, ground fog, patchy fog, glare, scud/ partial obscuration, horizon glow
■ Texture:	4 Patterns available in multiple sizes on a single disc with SP1/T
(Patterns may be selected from the substantial library of texture maps developed for the SP3/T product)	

### Options

- WIDE projection display systems
- Juxtaposed (overlapped) displays
- Switchable channels
- Large area data bases
- Moving objects
- Line printers
- Instructor's/Modeler's monitor
- On-Line modeling
- Interactive graphics modeling
- Model digitizing tablet

A **BET** ELECTRONICS COMPANY



## REDIFFUSION Simulation

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